REMARKS

Claims 1-4 have been examined on their merits.

Applicants' undersigned representative thanks the Examiner for his helpful suggestions with respect to the instant application.

Applicants herein add new claims 5-17. The new claims 5-17 are fully supported by the specification, and do not add any new matter. Entry and consideration of the new claims 5-17 is respectfully requested.

The Patent Office objects to claims 1, 3 and 4 as containing informalities. Applicants have amended claims 1, 3 and 4 to remove the informalities, and respectfully request that the objection to claims 1, 3 and 4 be withdrawn.

Claims 1-17 are all the claims presently pending in the application.

1. Claims 1, 3 and 4 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morelli *et al.* (U.S. Patent No. 6,236,674) in view of Bremer (U.S. Patent No. 6,320,879) and in further view of Bowie (U.S. Patent No. 5,956,323). Applicants traverse the rejection of claims 1, 3 and 4, and insofar as the rejection applies to new claims 5-17, for at least the reasons discussed below.

The Patent Office states that Morelli *et al.* disclose the interruption of a low power data packet. Applicants submit, however, that Morelli *et al.* does not disclose the active transmission of data packets in a low power mode. The transmitter of Morelli *et al.* will be wakes up *upon receipt* of a data packet that requires a response. When the packet to be responded to is being

received, the transmitter is being powered up from the sleep mode, and it is not transmitting data packets at all.[1] In addition, the Patent Office has acknowledged that Morelli *et al.* fails to disclose the transmission of a copy of the interrupted data packet at full power. *See* February 19, 2004 Non-Final Office Action, page 3.

The combination of Morelli *et al.*, Bremer and Bowie fails to teach or suggest a method of transitioning a transmitter from a low bit rate/low power state to a high bit rate/high power state, as recited in claim 1. There is no teaching or suggestion in the combination of Morelli *et al.*, Bremer and Bowie that a low bit rate/low power transmission of an inactive data packet is interrupted when a transmitter receives active data packets for transmission, based on a determination of whether the currently transmitted idle data packet should be interrupted. Bremer is silent with respect to low bit rate/low power transmission of inactive data packets, and Bowie is cited only for its teaching of low bit rate/low power transmission of inactive data packets. As discussed above, Morelli *et al.* teaches away from low bit rate/low power transmission of inactive data packets, in that transmitter of Morelli *et al.* is in "sleep mode" and is not even transmitting data packets. Furthermore, the Patent Office appears to be confusing the "active mode" of Morelli *et al.* with the high power mode of the present invention, in that the high power mode of the present invention refers to bit rates. Morelli *et al.*'s "high power" refers

[1] "If it is determined that a response is necessary, the control circuit provides a control signal to the transmitter to power up the transmitter from a sleep mode even before the entire packet has been received. The control circuit then continues to process the remainder of the packet as it is received while the transmitter powers up from the sleep mode. In this manner, the transmitter will become stabilized much earlier." *See* col. 4, lines 10-17 of Morelli *et al.*; *see also*, Abstract; col. 6, lines 54-59 describing "sleep mode" of the transmitter.

to the wattage emanating from an antenna. Finally, a data packet received at the receiver, not at the transmitter, triggers the transmitter "wakeup" of the combination of Morelli *et al.*, Bremer and Bowie. In sum, there is no teaching or suggestion in the combination of Morelli *et al.*, Bremer and Bowie of interrupting a low bit rate/low power transmission based on a determination made upon receipt of active data packets at a transmitter, as recited in claim 1. Thus, Applicants submit that the Patent Office cannot fulfill the "all limitations" prong of a *prima facie* case of obviousness, as required by *In re Vaeck.*

Since the combination of Morelli *et al.*, Bremer and Bowie fails to disclose a method for the interruption of a low bit rate/low power transmission of inactive data packets, Applicants submit that one of skill in the art would not be motivated to combine the three references. *In re Dembiczak* and *In re Zurko* require the Patent Office to provide particularized facts on the record as to why one of skill would be motivated to combine the three references. Without a motivation to combine, a rejection based on a *prima facie* case of obviousness is improper. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998)). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308 (Fed. Cir. 1999). The Patent Office must make specific factual findings with respect to the motivation to combine references. *In re Lee*, 277 F.3d 1338, 1342-44 (Fed. Cir. 2002). Although the Patent Office provides a motivation analysis with respect to reliable transmission of data when switching between low and high power states, Morelli *et al.*, Bremer and Bowie lack any teaching about the desirability of a method for the interruption of a low bit rate/low power transmission of inactive data packets based upon a determination made upon the receipt of

an active data packet. Thus, Applicants submit that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

Claim 3 recites an interruption means for interrupting the transmission of an idle data packet currently being transferred in a low bit rate/low power state based on a determination made when active data packets enter a transmitter. Applicants submit that claim 3 is allowable for the same reasons as claim 1, in that the combination of Morelli *et al.*, Bremer and Bowie does not teach a transmitter that interrupts a low bit rate/low power transmission of data packets based on a determination made upon the receipt of active data packets for transmission at a high bit rate/high power. For the sake of brevity, Applicants incorporate by reference the arguments for the patentability of claim 1 as being applicable to claim 3 as well.

Claim 4 recites a detection means for detecting an idle data packet that is being interrupted during a low bit rate/low power transmission, and a deletion means for discarding that same packet when retransmitted at a high bit rate. Applicants submit that claim 4 is allowable for the same reasons as claim 1, in that the combination of Morelli *et al.*, Bremer and Bowie does not teach a transmitter that interrupts a low bit rate/low power transmission of data packets based on a determination made upon the receipt of active data packets for transmission at a high bit rate/high power, nor does the combination teach or suggest a detection means and deletion means for handling such retransmitted packets. For the sake of brevity, Applicants incorporate by reference the arguments for the patentability of claim 1 as being applicable to claim 4 as well.

Based on the foregoing reasons, Applicants submit that the combination of Morelli *et al.*, Bremer and Bowie fails to disclose all of the claimed elements as arranged in claims 1, 3 and 4. Therefore, the combination of Morelli *et al.*, Bremer and Bowie clearly cannot render the present invention obvious as recited in claims 1, 3 and 4. Thus, Applicants submit that claims 1, 3 and 4 are allowable, and further submit that new claims 5-15 are allowable as well, at least by virtue of their dependency from claims 1, 3 and 4, respectively. Applicants respectfully request that the Examiner withdraw the § 103(a) rejection of claims 1, 3 and 4.

New independent claim 16 recites an interruption device that interrupts the transmission of an idle data packet currently being transferred in a low bit rate/low power state based on a determination made when active data packets enter a transmitter. Applicants submit that new claim 16 is allowable for the same reasons as claim 1, in that the combination of Morelli *et al.*, Bremer and Bowie does not teach a transmitter that interrupts a low bit rate/low power transmission of data packets based on a determination made upon the receipt of active data packets for transmission at a high bit rate/high power. For the sake of brevity, Applicants incorporate by reference the arguments for the patentability of claim 1 as being applicable to new claim 16 as well.

New independent claim 17 recites an interrupted symbol detector for detecting an idle data packet that is being interrupted during a low bit rate/low power transmission, and an interrupted symbol deletion device for discarding that same packet when retransmitted at a high bit rate. Applicants submit that new claim 17 is allowable for the same reasons as claim 1, in that the combination of Morelli *et al.*, Bremer and Bowie does not teach a transmitter that

interrupts a low bit rate/low power transmission of data packets based on a determination made upon the receipt of active data packets for transmission at a high bit rate/high power, nor does the combination teach or suggest an interrupted symbol detector and interrupted symbol deletion device for handling such retransmitted packets. For the sake of brevity, Applicants incorporate by reference the arguments for the patentability of claim 1 as being applicable to new claim 17 as well.

2. Claims 1, 3 and 4 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Russo (U.S. Patent No. 6,167,078) in view of Bremer and in further view of Bowie. Applicants traverse the rejection of claims 1, 3 and 4, and insofar as the rejection applies to new claims 5-17, for at least the reasons discussed below.

The Patent Office has acknowledged that Russo fails to disclose the transmission of a copy of the interrupted data packet at full power. *See* February 19, 2004 Non-Final Office Action, page 3.

The combination of Russo, Bremer and Bowie fails to teach or suggest a method of transitioning a transmitter from a low bit rate/low power state to a high bit rate/high power state, as recited in claim 1. There is no teaching or suggestion in the combination of Russo, Bremer and Bowie that a low bit rate/low power transmission of an inactive data packet is interrupted when a transmitter receives active data packets for transmission, based on a determination of whether the currently transmitted idle data packet should be interrupted. Russo is analogous to Morelli *et al.*, in that it discloses, *inter alia*, waiting for a "wakeup" signal to come out of a low

power state and being processing signals. Bremer is silent with respect to low bit rate/low power transmission of inactive data packets, and Bowie is cited only for its teaching of low bit rate/low power transmission of inactive data packets. In sum, there is no teaching or suggestion in the combination of Russo, Bremer and Bowie of interrupting a low bit rate/low power transmission based on a determination made upon receipt of active data packets at a transmitter, as recited in claim 1. Thus, Applicants submit that the Patent Office cannot fulfill the "all limitations" prong of a *prima facie* case of obviousness, as required by *In re Vaeck.*

Since the combination of Russo, Bremer and Bowie fails to disclose a method for the interruption of a low bit rate/low power transmission of inactive data packets, Applicants submit that one of skill in the art would not be motivated to combine the three references. Although the Patent Office provides a motivation analysis with respect to reliable transmission of data when switching between low and high power states, Russo, Bremer and Bowie lack any teaching about the desirability of a method for the interruption of a low bit rate/low power transmission of inactive data packets based upon a determination made upon the receipt of an active data packet. Thus, Applicants submit that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko.*

Claim 3 recites an interruption means for interrupting the transmission of an idle data packet currently being transferred in a low bit rate/low power state based on a determination made when active data packets enter a transmitter. Applicants submit that claim 3 is allowable for the same reasons as claim 1, in that the combination of Russo, Bremer and Bowie does not teach a transmitter that interrupts a low bit rate/low power transmission of data packets based on

a determination made upon the receipt of active data packets for transmission at a high bit rate/high power. For the sake of brevity, Applicants incorporate by reference the arguments for the patentability of claim 1 as being applicable to claim 3 as well.

Claim 4 recites a detection means for detecting an idle data packet that is being interrupted during a low bit rate/low power transmission, and a deletion means for discarding that same packet when retransmitted at a high bit rate. Applicants submit that claim 4 is allowable for the same reasons as claim 1, in that the combination of Russo, Bremer and Bowie does not teach a transmitter that interrupts a low bit rate/low power transmission of data packets based on a determination made upon the receipt of active data packets for transmission at a high bit rate/high power, nor does the combination teach or suggest a detection means and deletion means for handling such retransmitted packets. For the sake of brevity, Applicants incorporate by reference the arguments for the patentability of claim 1 as being applicable to claim 4 as well.

Based on the foregoing reasons, Applicants submit that the combination of Russo, Bremer and Bowie fails to disclose all of the claimed elements as arranged in claims 1, 3 and 4. Therefore, the combination of Russo, Bremer and Bowie clearly cannot render the present invention obvious as recited in claims 1, 3 and 4. Thus, Applicants submit that claims 1, 3 and 4 are allowable, and further submit that new claims 5-15 are allowable as well, at least by virtue of their dependency from claims 1, 3 and 4, respectively. Applicants respectfully request that the Examiner withdraw the § 103(a) rejection of claims 1, 3 and 4.

New independent claim 16 recites an interruption device that interrupts the transmission of an idle data packet currently being transferred in a low bit rate/low power state based on a

determination made when active data packets enter a transmitter. Applicants submit that new claim 16 is allowable for the same reasons as claim 1, in that the combination of Russo, Bremer and Bowie does not teach a transmitter that interrupts a low bit rate/low power transmission of data packets based on a determination made upon the receipt of active data packets for transmission at a high bit rate/high power. For the sake of brevity, Applicants incorporate by reference the arguments for the patentability of claim 1 as being applicable to new claim 16 as well.

New independent claim 17 recites an interrupted symbol detector for detecting an idle data packet that is being interrupted during a low bit rate/low power transmission, and an interrupted symbol deletion device for discarding that same packet when retransmitted at a high bit rate. Applicants submit that new claim 17 is allowable for the same reasons as claim 1, in that the combination of Russo, Bremer and Bowie does not teach a transmitter that interrupts a low bit rate/low power transmission of data packets based on a determination made upon the receipt of active data packets for transmission at a high bit rate/high power, nor does the combination teach or suggest an interrupted symbol detector and an interrupted symbol deletion device for handling such retransmitted packets. For the sake of brevity, Applicants incorporate by reference the arguments for the patentability of claim 1 as being applicable to new claim 17.

3. Claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morelli *et al.* in view of Bremer and Bowie, and in further view of Gibson *et al.* (U.S. Patent No. 6,049,885). Applicants traverse the rejection of claim 2 for at least the reasons discussed below.

Claim 2 depends from independent claim 1. The combination of Morelli *et al.*, Bremer and Bowie is deficient with respect to claim 1 for at least the reasons stated above, and incorporated herein.

Gibson *et al.* is directed to an apparatus for allowing a remote node to awaken a sleeping node of a network. Gibson *et al.*, however, fail to disclose the above-identified recitations with respect to independent claim 1. Therefore, Applicants submit that claim 2 is patentable at least by virtue of its dependency from claim 1, and respectfully request that the Examiner withdraw the § 103(a) rejection of claim 2.

4. Claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Russo in view of Bremer and Bowie, and in further view of Gibson *et al.* Applicants traverse the rejection of claim 2 for at least the reasons discussed below.

Claim 2 depends from independent claim 1. The combination of Russo, Bremer and Bowie is deficient with respect to claim 1 for at least the reasons stated above, and incorporated herein.

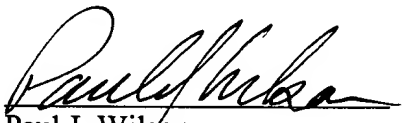
Gibson *et al.* is directed to an apparatus for allowing a remote node to awaken a sleeping node of a network. Gibson *et al.*, however, fail to disclose the above-identified recitations with respect to independent claim 1. Therefore, Applicants submit that claim 2 is patentable at least

by virtue of its dependency from claim 1, and respectfully request that the Examiner withdraw the § 103(a) rejection of claim 2.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Paul J. Wilson
Registration No. 45,879

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: June 14, 2004